

The development of a new approach to the energy management system formation and the estimation of its efficiency on the basis of the Consumer Quality theory

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Abstract

© 2016 Portland International Conference on Management of Engineering and Technology, Inc. The energy management system, that is used in enterprises of different countries of the world, is directed to solve such tasks as to increase the energy efficiency of output and production processes, to economize energy resources in general economic activities of an enterprise. As it was stated in the process of studying of a wide range of international publications, the majority of these tasks relate to the level of operative tasks of an enterprise. However, the solution of strategic tasks in the energy management system is often limited by the development of perspective energy saving plans, which in their turn are partly or even not connected with the plans of strategic development of an enterprise. In the current research we offer the mechanism of formation of connection between the activity planning in energy management system and the strategic development of an enterprise. Such methods as Voice of Customer and House of Quality are offered to realize this mechanism. It should be noted that the given mechanism can be used most efficiently in the enterprises which seek the mutual increase of energy efficiency of the production and the energy efficiency of the final output. The mechanism that is suggested in the given research will promote the integration of aims and goals of the energy management system into the system of strategic management of an enterprise activity. The novelty of this approach lies, firstly, in the identification of a possibility to apply the instruments of the theory of productive quality (Voice of Customer and House of Quality) to solve a range of tasks that are not typical for these instruments, secondly, in the application of strategy-oriented approach to solve the tasks concerning the management of energy resources of an enterprise.

<http://dx.doi.org/10.1109/PICMET.2016.7806820>

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